

MEDIA FREEDOM DECLINES IN USA

New countries have moved ahead of some Western democracies in the fifth annual Reporters Without Borders Worldwide Press Freedom Index.

"Each year new countries in less-developed parts of the world move up the Index to positions above some European countries or the United States. This is good news and shows once again that, even though very poor, countries can be very observant of freedom of expression. Meanwhile, the steady erosion of press freedom in the United States, France and Japan is extremely alarming," Reporters Without Borders said.

The three worst violators of free expression—North Korea, bottom of the Index at 168th place, Turkmenistan (167th) and Eritrea (166th)—have clamped down further.

Northern European countries once again come top of the Index, with no recorded censorship, threats, intimidation or physical reprisals in Finland, Ireland, Iceland and The Netherlands, which all share first place.

The USA (53rd) has fallen nine places since last year, after being in 17th position in the first year of the Index (2002). Relations between the media and the Bush administration sharply deteriorated after the president used the pretext of "national security" to regard as suspicious any journalist who questioned his "War on



Terrorism". The zeal of Federal courts which refuse to recognise the media's right not to reveal sources, even threatens journalists whose investigations have no connection at all with terrorism.

Apart from Yemen and Saudi Arabia (161st), all the Arabian Peninsula countries considerably improved their rank. Kuwait (73rd) kept its place at the top of the group, just ahead of the United Arab Emirates (77th) and Qatar (80th).

New Zealand was ranked at 19th place, the UK at 27th and Australia at 35th.

(Source: *Reporters Without Borders*, 24 October 2006, http://www.rsf.org/rubrique.php?id_rubrique=639)

SUPPRESSED REPORT SHOWS CANCER LINK TO GM POTATOES

Campaigners against genetically modified crops in the UK are calling for trials of GM potatoes this (northern) spring to be halted after releasing more evidence of links with cancers in laboratory rats.

UK Greenpeace activists said the findings, obtained from Russian trials after an eight-year court battle with the biotech industry, vindicated research by Dr Arpad Pusztai, whose work was criticised by the Royal Society and The Netherlands State Institute for Quality Control.

Graham Thompson, a Greenpeace campaigner, said the evidence "backs up the research

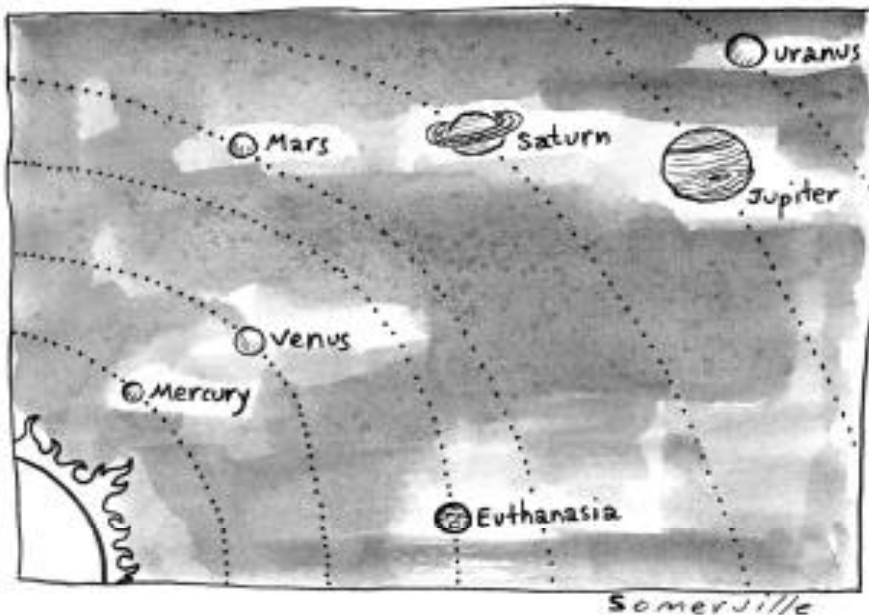
by Pusztai, which was smeared at the time by the industry".

Brian John of GM Free Cymru in Wales, which released the findings on 16 February, said the research was conducted in 1998 by the Institute of Nutrition of the Russian Academy of Medical Sciences and had been suppressed for eight years. It showed that rats fed GM potatoes developed tumours and suffered serious damage in the liver, kidneys and large intestine. The potatoes contained an antibiotic resistance marker gene.

The Russian institute refused to release all the information. However, Greenpeace and other groups mounted a protracted legal campaign to obtain the report. In May 2004, the Nikulinski District Court in Moscow ruled that information relating to the safety of genetically modified food should be open to the public. The institute, however, refused to release the report. Greenpeace and Russian activist groups again took the institute to court, and in September 2005 won a ruling that the report must be released.

Greenpeace consultant Irina Ermakova, who has conducted her own animal feeding trials with GM materials, analysed the findings. She said the GM Russett Burbank potatoes were the "most dangerous" of the feeds used in the trials and "on the basis of this evidence they *cannot* be used in the nourishment of people".

(Sources: *The Independent*, 17 February 2007, <http://tinyurl.com/2dwrff>; *GM Free Cymru*, http://www.gmfrecymru.org.uk/pivotal_papers/feedingrats.htm)



ELECTRIC FIELDS HELP TADPOLE TAILS TO REGENERATE

Tadpoles can regenerate their tails thanks to a technique that alters the electrical properties of their cells, according to a new study.

The build-up of electrical charge at the site of amputation helps guide tissue regeneration, suggest researchers Dr Michael Levin and colleagues at The Forsyth Institute in Boston, Massachusetts, USA. They speculate that doctors might one day be able to regenerate tissue in patients—such as those who have suffered spinal cord injury—by altering the flow of positively charged molecules out of cells.

Scientists have known for some time that applied electrical fields can influence tissue growth. But exactly how the body itself produces similar electrical fields to promote tissue regeneration remained a mystery.

"The influence of electric fields on development has been noted for well over a century; however, the phenomenon has remained unexplored on a mechanistic level and is largely treated as voodoo science by mainstream developmental biologists," says Professor Cliff Tabin of the Harvard Medical School's Department of Genetics. "This study is extremely interesting in starting to bring the topic into the realm of modern biology."

Dr Levin speculates that researchers might one day use gene therapy to help people regenerate lost fingers or heal injured spinal cords. He notes that humans do have some potential to re-grow lost tissue. We have the ability, for example, to regenerate fingertips until around the age of eight.

(Source: *New Scientist*, 28 February 2007, <http://www.NewScientist.com>; *Development e-Press*, 28 February 2007, doi: 10.1242/dev.0281, <http://dev.biologists.org/pap.shtml>)

LONG-TERM DATA STORAGE ON BACTERIAL DNA

Japanese scientists have developed a new technology that uses bacterial DNA as a medium for storing data in the long term, even for thousands of years.

Keio University Institute for Advanced Biosciences and Keio University Shonan Fujisawa Campus announced the development of the technology, which creates artificial DNA that carries up to more than 100 bits of data within the genome sequence, according to the JCN

Newswire of 27 February.

The universities said they successfully encoded "E = mc² 1905!"—Einstein's theory of relativity and the year he enunciated it—onto the common soil bacterium, *Bacillus subtilis*.

While the technology would most likely first be used to track medication, it could also be used to store text and images for many millennia, thwarting the longevity issues associated with today's disc and tape storage systems which only store data for up to 100 years in most cases.

The artificial DNA that carries the data to be preserved makes multiple copies of the DNA and inserts the original as well as identical copies into the bacterial genome sequence. The multiple copies work as back-up files to counteract natural degradation of the preserved data, according to the newswire.

Bacteria have particularly compact DNA, which is passed down from generation to generation. The information stored in that DNA can also be passed on for long-term preservation of large data files, the scientists said.

(Source: *Computerworld*, 27 February 2007, <http://tinyurl.com/3cy9tz>)

HUGE "OCEAN" DISCOVERED INSIDE EARTH'S MANTLE

Scientists scanning the deep interior of Earth have found evidence of a vast water reservoir beneath eastern Asia that is at least the volume of the Arctic Ocean.

The finding, made by Michael Wysession, a seismologist at Washington State University in St Louis, Missouri, and

his former graduate student Jesse Lawrence, now at the University of California, San Diego, will be detailed in a monograph to be published by the American Geophysical Union.

The researchers estimate that up to 0.1 per cent of the rock sinking down into the Earth's mantle in that part of the world is water, which works out to about an Arctic Ocean's worth of water.

Wysession has dubbed the new underground feature the "Beijing anomaly" because seismic wave attenuation was found to be highest beneath the Chinese capital city.

(Source: *LiveScience*, 28 February 2007, <http://tinyurl.com/2dva2e>)

SCIENTISTS PROBE MISSING OCEANIC CRUST

Dr Chris MacLeod, from Cardiff University, says the Earth's crust appears to be missing across an area of several thousand square kilometres. The hole in the crust is midway between the Cape Verde Islands and the Caribbean, on the Mid-Atlantic Ridge.

Dr MacLeod said the hole in the Earth's crust is not unique, but is recognised as one of the most significant. He said it was an "open wound on the surface of the Earth", where the oceanic crust, usually 6–7 km thick, is simply not there.

Dr MacLeod said the research could lead to a "new way of understanding" the process of plate tectonics. He will test theories he developed after visiting the area in 2001—including the possibility that the missing crust was caused by a



"detachment fracture".

The survey voyage, taking place during March and April, is led by marine geophysicist Professor Roger Searle, from Durham University.

The team intends to use sonar to build up an image of the seafloor and then take rock cores using a robotic seabed drill developed by the British Geological Survey in conjunction with Dr MacLeod.

(Source: *BBC News*, 1 March 2007, <http://tinyurl.com/24twf6>)

WAR ON TERRORISM BREEDS MORE TERRORISM?

A study by Peter Bergen and Paul Cruickshank, research fellows at the Center on Law and Security at the NYU School of Law, shows that the Iraq War has generated a stunning sevenfold increase in the yearly rate of fatal jihadist attacks, amounting to literally hundreds of additional terrorist attacks and thousands of civilian lives lost. Even when terrorism in Iraq and Afghanistan is excluded, fatal attacks in the rest of the world have increased by more than one-third.

The study shows that the Iraq conflict has greatly increased the spread of the Al-Qaeda ideological virus, as shown by a rising number of terrorist attacks in the past three years from London to Kabul and from Madrid to the Red Sea.

The study draws its data from the MIPT-RAND Terrorism database (available at www.terrorismknowledgebase.org), which is widely considered to be the best publicly available database on terrorism incidents.

RAND defines a terrorist attack as an

attack on a civilian entity designed to promote fear or alarm and further a particular political agenda. The study only included attacks that caused at least one fatality and were attributed by RAND to a known jihadist group. In some terrorist attacks, especially the case in Iraq, RAND has not been able to attribute a particular attack to a known jihadist group; thus the study likely understates the extent of jihadist terrorism in Iraq and around the globe.

Their study yields one resounding finding: the rate of terrorist attacks around the world by jihadist groups and the rate of fatalities in those attacks increased dramatically after the invasion of Iraq. Globally there was a 607 per cent rise in the average yearly incidence of attacks (28.3 attacks per year before and 199.8 after) and a 237 per cent rise in the average fatality rate. A large part of this rise occurred in Iraq, which accounts for half of the global total of jihadist terrorist attacks in the post-Iraq War period. But even excluding Iraq, the average yearly number of jihadist attacks and resulting fatalities still rose sharply around the world by 265 per cent and 58 per cent respectively.

(Source: *Mother Jones*, March/April 2007, <http://tinyurl.com/yszrdh>)

CAMERAS TO SPY ON AIRCRAFT PASSENGER BEHAVIOUR

Tiny cameras the size of a fingernail linked to specialist computers are to be used to monitor the behaviour of airline passengers as part of the War on Terrorism.

Cameras fitted to seat-backs will record every twitch, blink, facial expression or

suspicious movement before sending the data to onboard software which will check it against individual passenger profiles.

Scientists from Britain and Germany are spending £25 million developing a system which they hope will make it virtually impossible to hijack an airliner, by providing pilots and cabin crew with an early warning of a possible terrorist attack such as 9/11.

They say that rapid eye movements, blinking excessively, licking lips or ways of stroking hair or ears are classic symptoms of somebody trying to conceal something. A separate microphone will hear and record even whispered remarks. Islamic suicide bombers are known to whisper texts from the Koran in the moments before they explode bombs.

The software being developed by the scientists will be so sophisticated that it will be able to take account of nervous flyers or people with a natural twitch, helping to ensure there are no false alarms.

"We're trying to develop technologies that indicate the differences between normal passengers and those who may be a threat to others or themselves," said Catherine Neary of BAE Systems.

(Source: *Mail on Sunday, UK*, 11 Feb 2007)

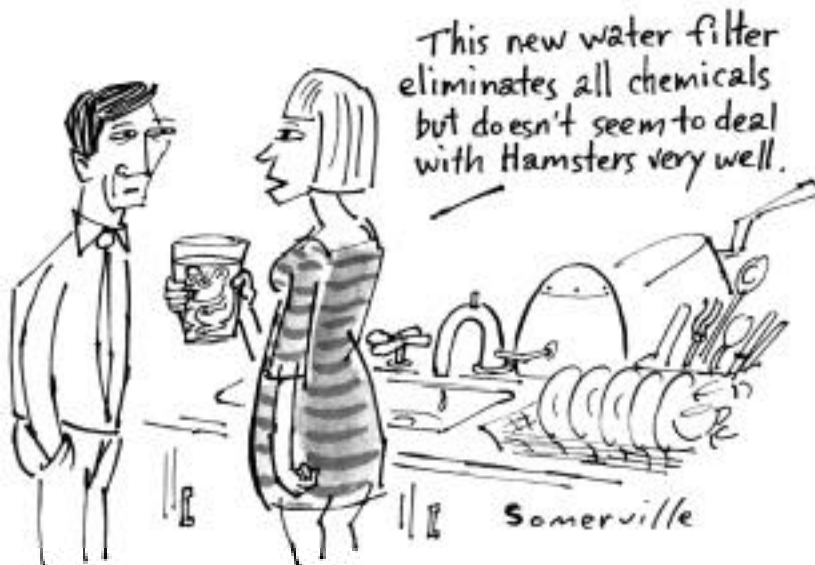
HIGH-RESOLUTION BRAIN SCAN CAN READ INTENTIONS

A team of neuroscientists from Germany and the UK has developed a powerful technique that allows them to look deep inside a person's brain and read their intentions before they act. The scientists are from the Max Planck Institute for Human Cognitive and Brain Sciences, the University College London and Oxford University.

The research breaks controversial new ground in scientists' ability to probe people's minds and eavesdrop on their thoughts, and it raises serious ethical issues over how brain-reading technology may be used in the future.

The team used high-resolution brain scans to identify patterns of activity before translating them into meaningful thoughts, revealing what a person planned to do in the near future. It is the first time scientists have succeeded in reading intentions in this way. The research builds on a series of recent studies in which brain imaging has been used to identify tell-tale activity linked to lying, violent behaviour and racial prejudice.

The latest work reveals the dramatic pace



at which neuroscience is progressing, prompting the researchers to call for an urgent debate into the ethical issues surrounding future uses for the technology. If brain-reading can be refined, it could quickly be adopted to assist interrogations of criminals and terrorists, and even usher in a "Minority Report" era (as portrayed in the Steven Spielberg science fiction film of that name), where judgements are handed down before the law is broken on the strength of an incriminating brain scan.

The researchers are honing the technique to distinguish between passing thoughts and genuine intentions.

(Source: The Guardian, 9 February 2007)

PRESCRIPTION DRUG DEATHS SKYROCKET IN USA

Poisoning from prescription drugs has risen to become the second-largest cause of unintentional deaths in the United States, according to the Centers for Disease Control and Prevention (CDC).

According to the CDC's *Morbidity and Mortality Weekly Report* (9 February 2007), researchers found that deaths from prescription drugs rose from 4.4 per 100,000 people in 1999 to 7.1 per 100,000 in 2004. This increase represents a jump from 11,000 people to almost 20,000 in the span of five years. Among the 20,000 who died, more than 8,500—double the number from 1999—were from "other and unspecified drugs". Deaths from psychotherapeutic drugs, like antidepressants and sedatives, nearly doubled from 671 to 1,300.

Mike Adams, a consumer health advocate and outspoken critic of pharmaceutical companies, said the drug industry is freely killing Americans.

"The entire drug industry, including the monopolistic drug giants and their FDA [Food and Drug Administration] co-conspirator, has clearly become the single greatest threat to the health and safety of the American people," Adams said.

"And yet the FDA continues to push more drugs onto more Americans than ever before, all the while pretending these drugs are safe and effective when, in reality, they are neither. Today's pharmaceutical industry is a massive fraud being perpetrated against the American people, propped up by illegal trade practices, monopolistic behavior and outright criminal behavior on the part of the FDA."

(Source: NewsTarget, 22 February 2007, <http://www.newstarget.com/z021635.html>)

DID IRAN GAS IRAQ'S KURDS?

US President George W. Bush once said, "If this is not evil, then evil has no meaning", in reference to the former Iraqi leader Saddam Hussein's alleged crime against the Kurds in which he's said to have used chemical weapons to destroy entire Kurdish villages and torture children in front of their parents. Bush's statement was an attempt to persuade the Iraqi nation, Americans and the international community that his decision to invade Iraq was justified on the basis of the 1988 Halabja case.

Halabja is referred to as one event in a large-scale campaign called Al-Anfal, which Human Rights Watch said in an exhaustive study, published in 1994, amounted to an extermination campaign against the Kurds of Iraq, resulting in the deaths of at least 50,000 and perhaps as many as 100,000 people, many of them women and children.

But when the former Iraqi foreign minister Tariq Aziz appeared in court in Baghdad on trial for the Al-Anfal massacres, he testified that Iraqi forces didn't use poison gas against the Kurds, that Iraq did not possess mustard gas, and that it was Iran that did it.

Aziz's remarks echoed a similar statement mentioned in a Stephen C. Pelletiere commentary which appeared in the *New York Times* of 31 January 2003, yet no one seems to have noticed it. Here is part of what he wrote about the claim that the former Iraqi leader gassed 5,000 Kurds at Halabja, a town in the southern part of Iraqi Kurdistan with about 60,000 inhabitants, the village that had the misfortune of being on the frontlines of the Iran-Iraq War:

"...as the Central Intelligence Agency's senior political analyst on Iraq during the Iran-Iraq war, and as a professor at the Army War College from 1988 to 2000, I was privy to much of the classified material that flowed through Washington having to do with the Persian Gulf. In addition, I headed a 1991 Army investigation into how the Iraqis would fight a war against the United States; the classified version of the report went into great detail on the Halabja affair.

"This much about the gassing at Halabja we undoubtedly know: it came about in the course of a battle between Iraqis and Iranians. Iraq used chemical weapons to try to kill Iranians who had seized the town, which is in northern Iraq not far from the Iranian border. The Kurdish civilians who died had the misfortune to be caught up in that exchange. But they were not Iraq's main target.

"And the story gets murkier: immediately after the battle, the United States Defense Intelligence Agency investigated and produced a classified report, which it circulated within the intelligence community on a need-to-know basis. That study asserted that it was Iranian gas that killed the Kurds, not Iraqi gas.

"The agency did find that each side used gas against the other in the battle around Halabja. The condition of the dead Kurds' bodies, however, indicated they had been killed with a blood agent—that is, a cyanide-based gas—which Iran was known to use. The Iraqis, who are thought to have used mustard gas in the battle, are not known to have possessed blood agents at the time.

"These facts have long been in the public domain but, extraordinarily, as often as the Halabja affair is cited, they are rarely mentioned. A much-discussed article in the *New Yorker* last March did not make reference to the Defense Intelligence Agency report or consider that Iranian gas might have killed the Kurds. On the rare occasions the report is brought up, there is usually speculation, with no proof, that it was skewed out of American political favoritism toward Iraq in its war against Iran.

"I am not trying to rehabilitate the character of Saddam Hussein. He has much to answer for in the area of human rights abuses. But accusing him of gassing his own people at Halabja as an act of genocide is not correct, because, as far as the information we have goes, all of the cases where gas was used involved battles. These were tragedies of war.

"The Ba'athist regime did kill thousands of Kurds during fighting to suppress occasional uprisings by what Americans call gangs or terror groups. Iran, Turkey and Syria have also killed thousands of Kurds, and of course the USA has killed thousands of innocent Iraqis to maintain order, albeit unintentionally. A better example of a government leader using chemicals to 'gas his own people' occurred in 1993 near Waco, Texas."

With Saddam's death, the opportunity for a full account of what happened to tens of thousands of Kurds in Halabja and Al-Anfal appears to be lost, along with the opportunity to hold the true criminals responsible for their crimes.

(Source: AlJazeera.com, 3 March 2007, <http://tinyurl.com/26ajqp>)